**COPY ALL FIGURES AND SHOW ALL WORK IN NOTEBOOK! FAILURE TO DO SO WILL RESULT IN A LASALLE**

CW#86HW#86: VOLUME of Prisms and Cylinders  
Geometry

1. Define volume:

2. How is volume different than surface area?

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| **Example 1:** Find the volume of a cube if the surface area of one face is 49 in2. | **Example 2:** Find the volume of the solid. Round your answer to two decimal places if necessary. | | **Example 3:** Find the volume of the solid. Round your answer to two decimal places if necessary. |
| 1. Find the volume of the right cylinder. Round your answer to two decimal places. | | 1. Find the volume of the rectangular prism. Round your answer to two decimal places. | |
| 1. Find the volume of the right cylinder. Round your answer to two decimal places. | | 1. Find the volume of the right prism. Round your answer to two decimal places, if necessary. | |
| 1. Find the volume of the right cylinder. Round your answer to two decimal places | | 1. Find the length *x* using the given volume *V*. *V*= 3148 yd3 ../../../../Desktop/Screen%20Shot%202017-04-30%20at%207.51.18%20PM.pn | |

Part II: Explaining the Formula

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| 1. What is the formula for volume of a cylinder? | | 1. What is the formula for volume of a rectangular prism? |
| 1. Explain how the formula for volume of a cylinder relates to area of a circle. | | 1. Explain how the formula for volume of a rectangular prism relates to area of a rectangle. |
| 1. Based off of observations from problems 3 and 4, find the volume of the triangular prism below. **Macintosh HD:Users:rmitrovich:Desktop:Screen Shot 2016-04-04 at 8.45.23 PM.png** | | 1. Explain how you found the volume of the triangular prism. Create your own formula. |
| 1. 7. Solve for volume. **Macintosh HD:Users:rmitrovich:Desktop:Screen Shot 2016-04-04 at 8.45.31 PM.png** | 1. **Macintosh HD:Users:rmitrovich:Desktop:Screen Shot 2016-04-04 at 8.45.46 PM.png**8. Solve for volume | 1. Macintosh HD:Users:rmitrovich:Desktop:Screen Shot 2016-04-04 at 8.46.18 PM.png |
| **17.** Macintosh HD:Users:rmitrovich:Desktop:Screen Shot 2016-04-04 at 8.45.55 PM.png |
| 11. Challenge: What is the volume of the rectangular prism? Explain your work.  **Macintosh HD:Users:rmitrovich:Desktop:Screen Shot 2016-04-04 at 8.47.03 PM.png** | | |

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| Exit Ticket: Volume of Prisms and Cylinders | |
| Name Period | |
| 1. Find the volume of the cylinder | 1. Find the volume of the prism |

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| Exit Ticket: Volume of Prisms and Cylinders | |
| Name Period | |
| 1. Find the volume of the cylinder | 1. Find the volume of the prism |